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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,648	03/30/2001	David W. Cannell	5725.0843-00	3537

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

VENKAT, JYOTHSNA A

ART UNIT

PAPER NUMBER

1615

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/820,648	Applicant(s) CANNELL ET AL.	
	Examiner JYOTHSNA A. VENKAT Ph. D	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 19-21, 30-63, 80-101, 118-135, 139-141, 150 and 152-167 is/are rejected.
- 7) ☒ Claim(s) 67-69, 78, 79, 105-107, 116 and 117 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/8/05</u> <i>Part of document</i> | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1-15,19-21,30-63,67-69,78-101,105-107,116-135,139-141,150 and 152-167.

DETAILED ACTION

Receipt is acknowledged of amendment and IDS filed on 12/8/05.

Claims 1-15, 19-21, 30-63, 67-69, 78-101, 105-107, 116-135, 139-141, 150 and 152-167 are pending in the application and the status of the application is as follows:

Information Disclosure Statement

The examiner did not considered “ results form literature search performed by assignee” since applicants did not provide the publication year.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-15,32-63, 80-101, 118-135 and 152-167 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **This is written description.**

3. Applicants are notified that the written description is based upon the expression claimed in claims 12, 60,76, 98 and 132 and the expression “ polymers comprising.. glycoproteins amino group” claimed in claims 15, 63, 101 and 135.

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To satisfy the Written description requirement, applicant must convey with reasonable clarity to one skilled in the art, as of the filing date that applicant were in possession of the claimed invention. Applicant's claims are drawn to

A composition for durable non-permanent shaping of least one keratinous fiber or durable retention of a non-permanent shape of least one keratinous fiber comprising:

1. (a) at least one compound comprising at least one C5 to C7 saccharide unit substituted with at least one amino group, and

(b) at least one film forming agent, wherein said at least one compound and said at least one film forming agent are present in an amount effective to impart a durable non-permanent shape to said at least one keratinous fiber or to durably retain a non-permanent shape of said at least one keratinous fiber

and the dependent claim 12 recites:

A composition according to claim 1, wherein said at least one C5 to C7 saccharide unit is further substituted with at least one group different from said at least one amino group.

and part of dependent claim 15 recites:

A composition to claim 1, wherein said at least one compound is chosen from polymers comprising at least one C5 monosaccharide substituted with at least one amino group, polymers comprising at least one C6 monosaccharide substituted with at least one amino group, polymers comprising at least one C7 monosaccharide substituted with at least one amino group, and glycoproteins comprising at least one C5 to C7 saccharide unit substituted with at least one amino group.

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The specification does not define substituents with at least one group different from said at least one amino group. The same is true for all the polymers recited in claim 15.

The expressions claimed does not convey to one of ordinary skill in the art that applicants were in possession of the claimed subject matter. Claims employing language at the point of novelty, such as applicants', neither provide those elements required to practice the inventions, nor "inform the public" during the life of the patent of the limits of the monopoly asserted. The expression could encompass myriad of compounds for which there is no description to even one single polymer or one substituent.

Response to Arguments

4. Applicant's arguments filed 12/8/05 have been fully considered but they are not persuasive.
5. Applicants point out that claims 1-15, 32-63, 80-101, 118-135 and 152-167 were rejected by the Examiner under 112, first paragraph and argue that these claims were all originally filed, and thus literal support for all the claims existed at the time of filing and in the rejection itself, only the subject matter recited in claims 12, 60, 76 98, and 132, and claims 15, 63, 101, and 135 were referenced and no reasons for rejection were given for claims 1-11, 14, 32-59, 61, 62, 80-97, 99, 100, 118-131, 132, 133, and 152-165, which do not depend, either directly or indirectly, on any of these claims and therefore argue that the rejection of claims 1-11 14, 32-59, 61, 62, 80-97, 99, 100, 118-131, 132, 133, and 152-165 is in error since no reason for rejection was given by the Examiner.
6. Claims 1-11, 14, 32-59, 61, 62, 80-97, 99, 100, 118-131, 132, 133, and 152-165 are rejected with respect to written description since the dependent claims depend on the

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independent claims that recite “at least one compound comprising at least one C5 to C7 saccharide unit substituted with at least one amino group”.

7. Regarding the language of claims 12, 60, 76, 98, and 132 presumably drawn into question by the examiner applicants argue that this language is particularly described, not only in the claims as originally filed, but also in the Specification on page 16, lines 9-12 and with respect to the language recited in claims 15, 63, 101, and 135 drawn into question by the examiner applicants also argue that language is being present in the claims as originally filed, and is particularly described in the specification on page 17, lines 3-8.

8. In response to the above argument, the specification contains no description of the compounds that are” glucosamine or galactosamine or allosamine or altrosamine or mannosamine or gulosamine or idosamine or talosamine “ further substituted with amino group of claim 15. At which carbon atom is the second amine group substituted? The specification indeed describes the point of attachment of first amino group to be substituted on different carbon atoms. However, there is no written description for the second amino group to be present. The same is true for claim 12, wherein the saccharide is further substituted with at least one group different from amino group? What are the substituents? Is it alkyl or alkenyl or aryl or heteroaryl or carboxyl or carbamoyl or thiol or nitro or halo or carbonyl or nitroso or sulfonic or ether or ester? There is no description for the substituents that can be present in addition to the amino group. If applicants disagree with the examiner they are requested to point to the specification, which describes the specific substituents.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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10. Claims 1-15, 32-63, 80-101, 118-135 and 152-167 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The expressions "polymers comprising at least one C5 monosaccharide substituted with at least one amino group, polymers comprising at least one C6 monosaccharide substituted with at least one amino group, polymers comprising at least one C7 monosaccharide substituted with at least one amino group, and glycoproteins comprising at least one C5 to C7 saccharide unit substituted with at least one amino group and substituents with at least one group different from said at least one amino group" are without metes and bounds. Recourse to the specification describes the language claimed but not the specific compounds and substituents.

Response to Arguments

11. Applicant's arguments filed 12/8/05 have been fully considered but they are not persuasive.
12. Applicants argue that breadth of the claim is not to be equated with indefiniteness and as long as the scope of the language is clear the claim complies with second paragraph.
13. In response to the above argument, the specification does not define the point of attachment for the second amino group on the saccharide unit, which already has one amino group.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 4, 9-11, 14-15, 19-21, 30, 32-43, 130-131, 134-135, 139-141, 150 and 152-163 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent 5,141,964 ('964) as evidenced by Skin Care and Cosmetic Ingredient Dictionary, page 114 (1994).

The dictionary is used to show that that chitosan disclosed in the example is the film forming agent and the dictionary discloses that this compound forms film on the skin.

See examples 1 and 5-9. See col. 1, lines 54-65 for glucosamine which is the claimed and elected hexosamine, chitosan is the film forming agent and gluconic acid is the additional sugar which is monosaccharide. The intended use does not carry patentable weight as the claims are drawn to the compositions.

Response to Arguments

16. Applicant's arguments filed 12/8/05 have been fully considered but they are not persuasive.

Applicants point out that this rejection has been rendered moot by the amendments to Claims 1 and 130, which explicitly recite that compositions set forth in these claims provide durable non-permanent shaping of at least one keratinous fiber or durable retention of a non-permanent shape of at least one keratinous fiber and patent '964 on the other hand, is directed to a skin moisturizer, and contains no disclosure with respect to providing durable non-permanent shaping of at least one keratinous fiber or durable retention of a non-permanent shape of at least one keratinous fiber.

In response to the above argument, claims are drawn to the compositions patent '964 discloses elected hexosamine, chitosan (film forming agent) and gluconic acid (additional sugar)

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therefore claiming of a new property or new function or unknown property which is inherently present in the patent '964 is not patentable.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claims 1-15, 30-43, 130-135, 139-141, 150, and 152-167 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U. S. Patents '964 and 4,240, 450 ('450) and 5,866,142 ('142).

The patent '964 does not disclose the specific film forming agents claimed or the limitation claimed in claims 12. However patent '450 teaches the specific film forming agents claimed in the instant application in the compositions. See the abstract, see col.1, lines 10-15, see col.2, line s29 et seq, see col.s 3-43 for the various cationic polymers and their preparation, see col.43, lines 25 et seq for the anionic polymers, see examples. See claim 20 for claiming two

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compositions, which are packaged in different containers and claims 164-167 are drawn to kit with two compartments. Patent '142 teaches the limitation of claim 12 and this compound is N-acetyl D-glucosamine. See the abstract and see col.3, lines 5-35, see clo.7 and see claim 7 and 31.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare compositions of '964 and use specific film forming agents of '450 expecting beneficial effect. One of ordinary skill in the art would be motivated to combine glucosamine with the specific film forming agents like cationic polymer or anionic polymer with the reasonable expectation of success that the polymers can be retained on the hair and these polymers are useful in various hair care art. One of ordinary skill in the art would be motivated to use N-acetyl- glucosamine for glucosamine in the compositions of '964 with the reasonable expectation of success that this compound provides hyaluronic acid which provide hydration results. The kit is also obvious since it is easy for the consumer to pack ingredients in two different containers. This is a prima facie case of obviousness.

Response to Arguments

20. Applicant's arguments filed 12/8/05 have been fully considered but they are not persuasive.

Applicants argue that the Examiner acknowledges that patent '964 does not disclose the specific film forming agents claimed and relies on the combination with patents '450 and '142 remedy this deficiency however the examiner does not provide factual support showing that both the patents suggest or provide motivation to select the claimed film forming agent thus the

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examiner has provided no evidence to support the alleged motivation to combine patents '964 and '450 and '142.

Examiner relied on patent '450 for the various claimed film forming agents and patent '142 was relied for claim 12 limitation. Examiner indeed provided reasons for using the specific film forming agents since patent '450 teaches various film forming agents in hair care art drawn to shaping of keratin fibers. One of ordinary skill in the art would be motivated to use anionic polymers as the film forming agents with the reasonable expectation of success that these polymers fix on the hair in significant amounts even when the compositions are intended to be rinsed off. One of the ordinary skill in the art would be motivated to use cationic polymers with the reasonable expectation of success that these polymers also fix on hair and they also provide softness and suppleness to the hair. .

Double Patenting

21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

22. Claims 1-3, 9-15, 19-21, 30-63, 130-135, 139-141, 150 and 152-162 drawn to compositions are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19, 24-26, 35 and 37-48 of copending

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Application No. 09/820,858. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is overlap of subject matter drawn to compositions, which has the same hexosamines and there is overlap with the film forming agents drawn to cationic polymers.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

This rejection is maintained.

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Allowable Subject Matter

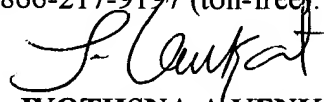
24. Claims 67-69, 78-79, 105-107 and 116-117 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTHSNA A. VENKAT Ph. D whose telephone number is 571-272-0607. The examiner can normally be reached on Monday-Friday, 10:30-7:30:1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THURMAN K. PAGE can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JYOTHSNA A VENKAT Ph. D
Primary Examiner
Art Unit 1615
